

WHAT IS CLAIMED IS~~What is claimed is:~~

1. A method for notifying the driver of a vehicle having adaptive cruise control, in order to inform the driver of activation of a request for taking control, which signals that a maximum braking force/pressure controllable by the adaptive cruise control is being applied, and the deceleration resulting therefrom is not sufficient to automatically decelerate the speed-regulated vehicle in time and to a sufficient degree, wherein at least two criteria relating to deceleration values are simultaneously met in order to activate the request for taking control.
2. The method as recited in Claim 1, wherein at least two of these criteria are values corresponding to vehicle deceleration, one of these two values being limited with regard to at least one of the variables time-related change, maximum steepness and absolute value.
3. The method as recited in at least one of the preceding claims, wherein the value of the maximum braking pressure/force $a_{MaxDecel}$ controllable by the adaptive cruise control can be changed, especially as a function of the speed being instantaneously driven, as a function of road conditions and/or as a function of the loading of the vehicle.
4. The method as recited in at least one of the preceding claims, wherein the decision system according to the present invention, for activating a request for taking control 109 is made dependent on at least one further condition with the aid of an AND-linkage 107, whereby each additional condition has to be simultaneously fulfilled for triggering a request for taking control to be able to be activated, one of these further conditions

expediently being a signal which notifies that the ACC system is actively controlling the vehicle.

5. The method as recited in at least one of the preceding claims, wherein the decision system according to the present invention, for activating a request for taking control 109 is made dependent on at least one further condition with the aid of an OR-linkage 108, whereby each additional condition can individually cause the triggering of a request for taking control, one of these further conditions expediently being a signal which notifies that an incorrect mode of operation of the ACC system has been determined.
6. The method as recited in at least one of the preceding claims, wherein, during a request for taking control, the warning is activated over a minimum time, and/or a minimum time must elapse between two warnings and/or the warning must be maintained until such time as a minimum distance from the preceding vehicle is achieved again and/or until the distance from the preceding vehicle is becoming greater again and/or until the driver intervenes in the driving action by operating the gas or brake pedal or the on/off switch.
7. The method as recited in at least one of the preceding claims, wherein, for forming the criteria with respect to the deceleration values, at least one factor is included with the others which is definitely predefined or variably calculated, which converts a driving program (comfortable, sporty, safe, energy-saving), selected by the driver, into the operating behavior of the ACC control automatic action.
8. A device for notifying the driver of a vehicle having adaptive cruise control, in order to inform the driver of the activation of a request for taking control, which

signals that a maximum braking force/pressure controllable by the adaptive cruise control is being applied, and the deceleration resulting therefrom is not sufficient to automatically decelerate the speed-regulated vehicle in time and to a sufficient degree, preferably for implementing one of the methods recited in Claims 1 through 7, wherein at least two criteria relating to deceleration values are simultaneously met in order to activate the request for taking control.

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